

Sub B1
Continued

--15. The method of claim 14, further comprising receiving the compressed reformatted image data between the transmitting and decompressing steps.--

--16. The method of claim 13, further comprising storing the compressed reformatted image data between the compressing and decompressing steps.--

--17. The method of claim 16, further comprising retrieving the compressed reformatted image data between the storing and decompressing steps.--

A1
--18. A method for compressing and decompressing an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, and decompressing compressed image data to form a restored image, comprising:

selecting a set of N raster lines;

interleaving the pixels of each of the N raster lines;

compressing the reformatted interleaved data;

decompressing the compressed interleaved data; and

un-interleaving the decompressed interleaved data to create raster image data for the restored image, the raster image data defining a plurality of raster lines extending in a final direction, each raster line having a plurality of pixels extending in a second direction. --

--19. The method of claim 18, wherein interleaving the pixels of the N selected raster lines comprises:

selecting a next pixel along the second direction from each of the N selected raster lines;

forming at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

storing the at least one byte. --

Sub B1
Continued
--20. The method of claim 18, wherein compressing the reformatted interleaved data compresses using at least one byte oriented compression technique to compress the reformatted interleaved data. --

--21. The method of claim 18, wherein the at least one byte oriented compression technique is at least one of LWZ, ZIP and Compress. --

--22. The method of claim 18, wherein un-interleaving the decompressed interleaved data to the raster image data of the restored image, comprises:

selecting at least one next byte of the decompressed interleaved data; and

41
distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image. --

--23. An image compression and decompression system that compresses an original image having a plurality of raster lines extending in a first direction, each raster line having a plurality of pixels extending in a second direction, and decompresses compressed image data to form a restored image, the system comprising:

a binary data reformatter that reformats raster image data of the original image by interleaving pixels of the original image;

a compressor that compresses the interleaved raster image data;

a decompressor that decompresses the compressed interleaved data;

an inverse binary data reformatter that un-interleaves the interleaved data and forms a raster image data of the restored image by selecting at least one next byte of the decompressed interleaved data and distributing each bit of the at least one byte to corresponding pixels in N raster lines of the restored image; and

an output controller that outputs the un-interleaved data to an output device. --

Sub B1
Continued
A1
--24. The image compression system of claim 23, wherein interleaving the pixels of the N selected raster lines, the system:

selects a next pixel along the second direction from each of the N selected raster lines;

forms at least one byte of reformatted interleaved data from the raster data of the selected pixels of the N selected raster lines; and

stores the at least one byte. --

--25. The image compression system of claim 23, wherein the compressor is a byte-oriented compressor. --

--26. The image compression system of claim 23, wherein the compressor uses at least one of LWZ, ZIP and Compress.

--27. The original image decompression system of claim 23, wherein the decompressor is a byte-oriented compressor technique decompressor. --

REMARKS

Claims 1-27 are pending in this application. No new matter has been added. Prompt and favorable consideration of this application including new claims 13-27 is respectfully requested.

REPLY TO THE ELECTION/RESTRICTION REQUIREMENT

In reply to the August 16, 2002, Election of Species Requirement, Applicant provisionally elects embodiment 2, Fig. 4, with traverse. Applicant respectfully submits that at least claims 1-4, 7-10 and 13-27 correspond to the species shown in Fig. 4.

Applicant respectfully submits that the Office Action has failed to identify any genus of which Figs. 3-5 could be a species. Consequently, an election of species without a genus is improper.